

**BEFORE THE PUBLIC UTILITIES COMMISSION  
OF THE STATE OF CALIFORNIA**



**FILED**

8-15-16  
04:59 PM

Application of Southern California Edison Company (U338E) for Approval of Contracts Resulting From Its 2014 Energy Storage Request for Offers (ES RFO).

Application 15-12-003  
(Filed December 1, 2015)

Application of Pacific Gas and Electric Company for Approval of Agreements Resulting from Its 2014-2015 Energy Storage Solicitation and Related Cost Recovery. (U39E).

Application 15-12-004  
(Filed December 1, 2015)

**REPLY COMMENTS OF THE UTILITY REFORM NETWORK**

Nina Suetake  
Staff Attorney

Eric Borden  
Energy Analyst

Kevin Woodruff, Principal  
Woodruff Expert Services

**The Utility Reform Network**  
785 Market Street, Suite 1400  
San Francisco, CA 94103  
Phone: (415) 929-8876  
Fax: (415) 929-1132  
E-mail: [nsuetake@turn.org](mailto:nsuetake@turn.org)

August 15, 2016

## **REPLY COMMENTS OF THE UTILITY REFORM NETWORK**

Pursuant to Rule 14.3 of the Commission's Rules of Practice and Procedure, The Utility Reform Network ("TURN") submits these comments in reply to certain other parties' opening comments on the Proposed Decision ("PD"), filed on July 20, 2016.

TURN responds herein to parties' positions regarding the treatment in the computation of the Power Charge Indifference Adjustment ("PCIA") of the costs of energy used to charge a storage asset ("charging costs"), to parties' comments about TURN's concern over the negative cash flows storage projects can impose on bundled customers, and to parties' contention that storage should not be considered "generation".

### **I. JOINT IOU PROTOCOL FOR COMPUTING PCIA SHOULD CONSIDER STORAGE CHARGING COSTS AT LEAST ONCE, BUT ONLY ONCE.**

The PD presents a concern that "when costs associated with charging power are included [in the PCIA] there is the possibility of this charging cost being reflected twice - once as a storage cost, and second as a cost for the generation."<sup>1</sup> This "double counting" leads the PD to "conclude that the Joint IOU Protocol should be modified to remove the costs associated with charging the storage resource from the Indifference Amount calculation."<sup>2</sup>

The CCA ("Community Choice Aggregation") Parties agree with both the PD's logic and its solution to remove charging costs from the PCIA calculation.<sup>3</sup> The IOU's all agree that charging costs should not be counted twice in the PCIA calculation, but disagree that the Joint IOU Protocol necessarily results in any double counting. PG&E explains that under its storage contract terms, the utility is responsible for charging costs and that these are incremental to any other costs included in the PCIA calculation.<sup>4</sup> SCE provides an example where inclusion of charging costs would be inappropriate (a "hybrid" solar plus storage system) and therefore views the PD's intent as a "point of clarification."<sup>5</sup> SDG&E similarly believes "the Joint IOU Protocol does not require

---

<sup>1</sup> Proposed Decision ("PD"), pp. 22-23.

<sup>2</sup> PD, p. 23.

<sup>3</sup> CCA Parties' Comments, p. 5.

<sup>4</sup> PG&E Opening Comments, p. 8.

<sup>5</sup> SCE Opening Comments, p. 3. PG&E provides a similar example – PG&E Opening Comments, p. 9.

further modification,” and suggests the PD be clarified.<sup>6</sup> Finally, ORA recommends additional information and further discussion on the issue, suggesting a workshop no later than 60 days after the final decision.<sup>7</sup>

TURN agrees with the IOU’s that the Joint IOU Protocol does not necessarily result in double counting of charging costs. Further, the PD errs in so far as it assumes charging costs are a subset of “generation” costs. PG&E explains that charging of the storage resource is a wholesale market transaction, the cost of which is incremental to any other generation costs incurred by the utility.<sup>8</sup> The CCA Parties’ statement, that “the PCIA already reflects generation costs for power that the IOUs will procure and then use to charge energy storage resources” does not account for the fact that the charging costs, when incurred by the IOU, are an additional cost to bundled utility customers. Such charging costs should therefore be viewed as separate and distinct from other generation costs in the PCIA. TURN believes that the PD should be modified to reflect this understanding.

Nevertheless, TURN does agree that when charging costs are *not* incremental costs paid by bundled utility customers, they should be excluded from the PCIA calculation – as SCE and PG&E point out this may occur in a “hybrid” storage design when storage is charged directly by a generator (e.g. solar plus storage). Additionally, contractual arrangements where charging costs are incurred by the project developer or third party owner, and not by the utility, should be excluded from the PCIA calculation. Utility ERRA filings should track contractual storage arrangements and subsequent treatment of storage costs in the PCIA calculation.

## **II. PROPOSED DECISION APPROPRIATELY RECOGNIZES TURN’S CONCERN OVER NEGATIVE CASH FLOWS TO BUNDLED CUSTOMERS AS BASIS FOR REJECTING “STORAGE ADDER”**

The PD appropriately rejects the proposal of the CCA and Direct Access (“DA”) parties to implement a “storage adder”, citing TURN’s concerns about the potential for the CCA/DA proposal to impose negative cash flows on bundled customers.<sup>9</sup> Both the

---

<sup>6</sup> SDG&E Opening Comments, p. 1.

<sup>7</sup> ORA Opening Comments, pp. 4-5.

<sup>8</sup> PG&E Opening Comments, p. 8.

<sup>9</sup> PD, pp. 19-20.

CCA Parties and Shell Energy North America (US), L.P. (“Shell”) take issue with TURN’s express concern that storage assets can impose negative cash flows on bundled customers of the utilities procuring storage,<sup>10</sup> a fact that TURN sees as key to the need for a PCIA to maintain bundled customer indifference to the departure of bundled load. The CCA Parties addressed TURN’s concern over “negative cash flows” by stating:

But TURN did not explain how such a scenario would develop, or how likely it is that such an event would occur. Furthermore, TURN has not provided any evidence regarding a negative cash flow event and its possible effects. Without presenting factual evidence, such assertions are speculative and contribute nothing to the record.<sup>11</sup>

TURN did not previously feel it necessary to explain these items in detail. To clarify, negative cash flows can occur when the costs bundled customers pay for a storage asset exceed the benefits bundled customers receive from the operation of the asset. Negative cash flows harm bundled customers by increasing bundled customers’ costs. Notwithstanding TURN’s questions regarding the Joint IOU Protocol to incorporate storage into the PCIA,<sup>12</sup> the Joint IOU Protocol is designed to estimate the magnitude of storage assets’ cash flows – whether positive or negative. The Commission should dismiss the CCA Parties’ doubts about the relevance of negative cash flows to assessing the Joint IOU Protocol and PCIA policy more generally.

Shell takes a different approach to question the relevance of bundled customers’ potential negative cash flows to the PCIA for storage assets in saying:

...the potential for an IOU’s energy storage assets to generate negative cash flow is a direct consequence of an energy storage procurement policy that is not based solely on sound economic principles. The Commission adopted an energy storage procurement mandate to encourage the development of energy storage, not to ensure the lowest cost resources to provide energy and capacity. All LSEs have an energy storage procurement obligation. If an IOU’s energy storage contracts have been approved by the Commission as ‘cost effective,’ the IOU’s bundled sales customers should bear the cost of these energy storage contracts regardless of whether the energy storage assets generate negative cash flows.<sup>13</sup>

---

<sup>10</sup> TURN’s Opening Brief, May 25, 2016, p. 2 and Reply Brief, June 8, 2016, pp. 4-5.

<sup>11</sup> CCA Parties’ Opening Comments, p. 4.

<sup>12</sup> TURN’s Opening Brief, May 25, 2016, pp. 1-5.

<sup>13</sup> Shell Opening Comments, p. 5.

TURN notes first that Shell does not appear to share the CCA Parties' confusion about how negative cash flows could result from the utility acquisition of storage assets; rather, Shell identifies such results as a consequence of state policy to encourage the development of storage assets. Shell appears to suggest that the Commission should not concern itself with such potential negative cash flows because all LSEs have a storage procurement obligation. However, the obligation Shell cites is imposed differently on the utilities and the CCAs and Energy Service Providers ("ESPs"); in particular, the CCAs and ESPs have lower storage procurement targets than do the utilities.<sup>14</sup> Given that Shell seems to accept that storage assets will generate negative cash flows, it appears to be proposing that bundled customers be at risk for more negative cash flows than the customers of CCAs and ESPs.

Finally, in arguing that bundled customers receive other benefits of storage, Shell again states:

The 'value' of an IOU's energy storage includes time-shifting benefits, system level benefits, ancillary services, and transmission/distribution grid reliability benefits.<sup>15</sup>

TURN notes that "system level benefits" and "transmission/distribution grid reliability benefits" are shared by *all* customers, regardless of whether they are served by utilities, CCAs or ESPs. As such, the net costs of such resources should be shared by all customers.

### **III. ELECTRIC ENERGY STORAGE RESOURCES SHOULD BE CONSIDERED AS "GENERATION" FOR PURPOSES OF THE PCIA**

The CCA Parties and Shell argue that storage should not be considered "generation".<sup>16</sup> Storage assets have long been considered as "generation" for purposes of electric system planning, modeling and operations.<sup>17</sup> As just one example, the capacity

---

<sup>14</sup> Decision (D.) 13-10-040, p. 46.

<sup>15</sup> Shell Comments, p. 3.

<sup>16</sup> CCA Parties' Opening Comments, p. 4 and Shell Opening Comments, p. 2. The page of Decision 14-10-045 that the CCA Parties cited as authority for their claim that the Commission has recognized that "energy storage is not a generation resource" does not contain any such language.

<sup>17</sup> Storage assets have historically consisted primarily of pumped storage generation.

of storage resources has long been counted in assessing utility systems' capabilities to meet their peak demand.

Regardless of whether storage is considered as "generation" or not, the inclusion of storage assets in a utility's portfolio will have an impact on the cash flows – negative or positive – that accrue to bundled customers. As such, TURN urges that such impacts be considered in the PCIA.

Date: August 15, 2016

Respectfully submitted,

By: \_\_\_\_\_/s/\_\_\_\_\_  
Nina Suetake  
Staff Attorney

**The Utility Reform Network**  
785 Market Street, Suite 1400  
San Francisco, CA 94103  
Phone: (415) 929-8876  
Fax: (415) 929-1132  
Email: [nsuetake@turn.org](mailto:nsuetake@turn.org)